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Alcohol use in fishing communities and men's willingness to participate in an alcohol, violence and HIV risk reduction intervention: qualitative findings from Rakai, Uganda

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ABSTRACT

Alcohol use, intimate partner violence (IPV) and HIV infection are associated, but few programmes and interventions have addressed their synergistic relationship or been evaluated for effectiveness and acceptability. This is a critical gap in populations with high rates of alcohol use, HIV and IPV, such as Uganda's fishing communities. This study examined drinking norms, barriers and facilitators to engagement in a risk reduction programme, and ideas for tailoring. Results showed that alcohol use is common in fishing villages. While men and women drink, gendered notions of femininity deem alcohol largely unacceptable for women. Plastic sachets of liquor were the most common alcoholic drink. Participants did not understand the definition of 'hazardous drinking', but recognised connections between drinking, violence and sexual risk-taking. The idea of an alcohol, IPV and HIV risk reduction intervention was supported, but barriers need to be addressed, including how best to help those uninterested in reducing their drinking, addressing normalisation of drinking and how best to inform those who truly need intervention. Intervention to people living with HIV around the time of diagnosis and treatment may be warranted. Study findings highlight the potential to integrate alcohol and IPV reduction programmes into an HIV service provision.

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Background

Alcohol is the most commonly used addictive substance in the world (National Council on Alcoholism and Drug Dependence 2015. In 2015, the World Health Organization estimated that alcohol consumption accounted for 5.1% of the total global burden of disease (World Health Organization 2015). Although the rate and

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volume of alcohol consumption is greatest in high-income settings such as Western Europe, the largest alcohol-attributable burden of disease is in low-income settings such as sub-Saharan Africa (Rehm et al. 2009; World Health Organization 2009). An association between alcohol consumption and violence, including intimate partner violence (IPV) has been established (National Council on Alcoholism and Drug Dependence 2015; World Health Organization 2006). Studies suggest women's chances of experiencing male-to-female IPV increase if one or both partners consume alcohol (Devries et al. 2014; Leadley, Clark and Caetano 2000; Leonard and Quigley 1999). However, alcohol's ability to increase aggression is stronger in men than in women (Beck and Heinz 2013; Giancola et al. 2009). Further, men consume alcohol more often than women do, and research indicates that men's, but not women's, use of alcohol predicts whether or not male-perpetrated IPV occurs at all (World Health Organization 2014; White and Chen 2002).

While not all men who drink alcohol use violence, interventions that target boys and men and focus on preventing and treating hazardous drinking, both in and out of the context of violent behaviour, are urgently needed. Hazardous drinking refers to alcohol use that increases risk of harmful consequences (e.g. the use of violence) for the drinker or other people (World Health Organization 2001). To date, few standalone alcohol interventions combined with violence reduction approaches have been designed, implemented and/or tested for feasibility and impact, particularly in sub-Saharan African countries. Uganda has one of the highest global per capita rates of alcohol use (World Health Organization 2014), and violence against women is common. In the rural Rakai District, 58.9% and 28.5% of women report lifetime and past year IPV, respectively (Kouyoumdjian et al. 2013). Research from Rakai has also established that alcohol and IPV are correlated and interactively associated with increased risk for HIV infection in women (Zablotska et al. 2006, 2009). The most concerning levels of alcohol use and HIV infection in Uganda are in fishing communities surrounding Lake Victoria. In four fishing communities in the Rakai region, 34% of women and 51% of men report alcohol use before sex in the past year, and the median HIV prevalence is 41% (Chang et al. 2016). Prior investigations in two other fish landing sites in Uganda found that 62% of male drinkers reported alcohol intoxication during the past month, and drinking was associated with risky sexual behaviours, such as inconsistent condom use, engaging in transactional sex and having multiple sexual partners (Tumwesigye et al. 2012).

Although associations between alcohol use, HIV infection and IPV against women have been established in Rakai (Zablotska et al. 2006, 2009), few studies have examined the role men's alcohol use plays in their perpetration of IPV against female partners, understandings of the links between alcohol and health and whether alcohol prevention, screening and treatment could be feasibly delivered in a culturally acceptable way as a standalone intervention or within existing HIV programming. Currently, there are no alcohol treatment or IPV-focused interventions in these high HIV risk areas.

The purpose of this study was to deepen our understanding of the role alcohol plays in the Lake Victoria fishing communities in Rakai, and inform the design of a novel alcohol harm-reduction approach for implementation in an existing HIV

programme. Specific goals were to explore local drinking customs and norms in fishing areas; assess gender differences in drinking behaviours; examine the relationship between men's drinking and use of IPV; assess barriers and facilitators to participation (particularly of men) in this type of programme; and generate ideas for feasible, culturally acceptable risk reduction interventions.

Methods

This study utilised a qualitative data collection approach. Participants included men and women recruited via the Rakai Community Cohort Study (RCCS), an ongoing HIV surveillance cohort established by the Rakai Health Sciences Program (RHSP) in 1994 as part of a community-randomised trial on treatment of sexually transmitted infections for HIV prevention. Details of the RCCS are published elsewhere (Wawer et al. 1998, 1999). Briefly, the RCCS consists of a demographic census, the recording of household GPS coordinates and a quantitative survey questionnaire to assess demographic characteristics, sexual and health-seeking behaviours and HIV service uptake. After participants have completed the RCCS interview, they are offered free HIV testing and post-test counselling by on-site counsellors.

For the current study, 30 in-depth interviews and 12 focus groups were conducted between December 2016 and February 2017 with 152 men and women living in three of the largest Lake Victoria fishing communities in the Rakai region: Ddimo, Malembo and Namirembe. Interviews were carried out with individual male participants between the ages of 15 and 49 years. Twelve interview participants (40%) were living with HIV. Focus groups were done with both men and women who were recruited based on their membership in a specific group of interest. We conducted focus groups with community members, stratified by age and gender, including young men and women (15–24 years old) and adult men and women (25–49 years old). Focused discussions were also conducted with people in specific professional and leadership groups, including RHSP HIV Counselling and Testing (HCT) counsellors and RHSP Community Advisory Board (CAB) members. CAB members are key representatives from different areas of the Rakai region who meet on a regular basis with RHSP leaders to discuss new studies and projects, and serve as liaison between RHSP and the community. All adult participants, emancipated minors and the parents of minors provided written informed consent, and unemancipated minors under age 18 provided written assent to participate. In Uganda, individuals under the age of 18 are considered emancipated if they are married, pregnant or have had a child or are the head of a household (UNCST 2014). With participant consent, each interview or focus group was audio recorded.

Participants were recruited using a purposive sampling approach. Male interview participants and community member focus group participants were drawn from the RCCS survey population. Eligible RCCS respondents were asked their permission to be re-contacted by a member of the RHSP Social and Behavioral Sciences Department. Criteria for inclusion included: being aged 15–49 years, a resident of one of the RCCS fishing communities, and providing consent to participate in the study. Participants in the HCT counsellor and CAB focus groups were also recruited by someone from the

RHSP Social and Behavioral Sciences Department. Criteria for inclusion in these groups included being an active HCT counsellor or being an RHSP CAB member and providing consent to participate in the study. Exclusion criteria for all categories included being incapable of giving informed consent and/or being unwilling to participate (or provide consent for a minor to participate). Interviews and focus groups were conducted in the local language of Luganda by members of the RHSP's Social and Behavioral Sciences Department, each of whom was a university graduate with 3–5 years of prior qualitative research experience. Interviewers were professional employees of RHSP, and while some may have been known in the study population as a RHSP *basawo* (health professional) they were generally unfamiliar to participants on a personal level.

In-depth interviews were conducted in person, on a one-on-one basis, and were facilitated by a professional RHSP interviewer who collected information in private from the participant. Interviews were designed to provide individual-level information about the participant's own use of alcohol, personal knowledge about the risks associated with alcohol use and how its use was linked with IPV and HIV risk, and responsiveness to and interest in a combined alcohol and IPV (Alcohol + IPV) reduction intervention. Interviews with HIV-positive men focused on their specific behaviour changes and/or feelings after learning about their HIV diagnosis. They were also prompted to share how living with HIV affected their consumption of alcohol and use of violence.

Focus groups expanded on findings from interviews by gathering community-level information on norms, attitudes and practices in the fishing communities. Focus groups were led by a trained moderator and assisted by a skilled note-taker. Focus group participants were guided through discussion about community-level drinking customs and habits, gender differences in local patterns of alcohol use and perceptions about alcohol use and alcohol-related health and social problems, including the association between men's drinking and use of violence and sexual risk-taking. Both interview and focus group participants were asked their thoughts on factors that might inhibit or encourage local fishing area residents to participate in an HIV services-based Alcohol + IPV risk reduction intervention, and ideas for tailoring.

All participants consented to recording. Recordings were transcribed and translated from Luganda to English. Both interviews and focus groups were facilitated by the use of a semi-structured guide, and all sessions lasted approximately 1–2 hours. All interview and focus group participants were compensated with 10,000 Uganda shillings (approximately US$3 at the time of data collection) for their time.

Analysis of transcripts was managed using QSR NVivo V11 through identification of recurrent themes following Crabtree and Miller's five-step interpretive process (Crabtree and Miller 2000; QSR International Pty Ltd 2012). First, transcripts were read to identify common themes, and codes were developed. Three research assistants assisted with the coding process. To ensure high correlation between multiple coders, approximately 10% of data was double-coded, and inter-rater reliability was assessed and ensured to reach above 95%. Coded text was extracted and organised and read to identify emergent themes. Matrices were created to compare codes by type of participant (alcohol use status, age, IPV typology, marital status, HIV status, etc.).

Institutional Review Board approvals were granted by the University of California, San Diego's Human Research Protections Program, the Uganda Virus Research Institute's Research Ethics Committee and the Uganda National Council for Science and Technology.

Results

Qualitative data were collected from 182 participants; 152 (83.5%) men and women participated in focus groups, and 30 men (16.5%) participated in an interview. Twelve focus groups were conducted with adolescent and young adult men (focus group n = 3); adolescent and young adult women (n = 3); adult men (n = 2); adult women (n = 2); HCT counsellors (n = 1); and RHSP CAB members (n = 1). All age groups were represented. Women and men were relatively equally represented in each age group. Education levels were generally low; 50.7% (n = 77) of participants had not completed primary school. The most common occupations included: fishing (n = 41, 27.0%); general business/business owner (n = 39, 25.7%); and 'other professional' (n = 18, 11.8%). Men were more commonly involved in fishing (n = 38, 92.7% male vs. n = 3, 7.3% female), while women were more commonly involved in general business (n = 33, 84.6% female vs. n = 6, 15.4% male). Table 1 shows the demographic information of focus group participants, overall and by gender.

All interview participants were men, with 20.0% (n = 6) aged 15–17, 43.3% (n = 13) aged 18–24, 0.0% aged 25–29, 23.3% (n = 7) aged 30–39 and 13.3% (n = 4) aged 40+.

Table 1. Sociodemographic characteristics of participants: focus groups.

	Total		Female		Male	
	N = 152	%	n = 86	56.6%	n = 66	43.4%
Age						
15–17 years	22	14.5%	12	54.5%	10	45.5%
18–24 years	44	28.9%	27	61.4%	17	38.6%
25–29 years	29	19.1%	17	58.6%	12	41.4%
30–39 years	37	24.3%	19	51.4%	18	48.6%
≥40 years	20	13.2%	11	55.0%	9	45.0%
Religion						
Christian	130	85.5%	73	56.2%	57	43.8%
Muslim	22	14.5%	13	59.1%	9	40.9%
Education level						
Did not complete primary education	77	50.7%	34	44.2%	43	55.8%
Completed primary school	65	42.8%	45	69.2%	20	30.8%
Completed secondary + education	10	6.6%	7	70.0%	3	30.0%
Marital status						
Single*	74	48.7%	45	60.8%	29	39.2%
Married	78	51.3%	41	52.6%	37	47.4%
Occupation						
Business (general), business owner	39	25.7%	33	84.6%	6	15.4%
Counsellor	6	3.9%	5	83.3%	1	16.7%
Domestic work / Farming	17	11.2%	13	76.5%	4	23.5%
Fishing	41	27.0%	3	7.3%	38	92.7%
Other Professional	18	11.8%	10	55.6%	8	44.4%
Restaurant / Bar Worker	7	4.6%	7	100.0%	0	0.0%
Shop worker	15	9.9%	8	53.3%	7	46.7%
Student / Unemployed	8	5.3%	7	87.5%	1	12.5%
Transportation	1	0.7%	0	0.0%	1	100.0%

*One participant widowed.

Table 2. Sociodemographic characteristics of participants: interviews (all participants male).

	Total	
	N = 30	%
Age		
15–17 years	6	20.0%
18–24 years	13	43.3%
25–29 years	0	0.0%
30–39 years	7	23.3%
≥40 years	4	13.3%
Religion		
Christian	29	96.7%
Muslim	1	3.3%
Education Level		
Did not complete primary education	19	63.3%
Completed primary school	11	36.7%
Marital Status		
Single	9	30.0%
Married	21	70.0%
Occupation		
Business (general), business owner	2	6.7%
Fishing	22	73.3%
Other Professional	3	10.0%
Student / Unemployed	2	6.7%
Transportation	1	3.3%
HIV status		
Recruited through HIV clinic	12	40.0%

Education levels for interview participants were also low, with most (n = 19, 63.3%) not having completed primary school. Most of the participants were married (n = 21, 70.0%), defined as either being: officially married according to law; traditionally married through the customary 'introduction ceremony' involving a dowry; or living in a consensual union (i.e. living together but not legally married). Most interview participants cited fishing as their primary occupation (n = 22, 73.3%). Twelve participants were HIV-positive. Sociodemographic information on all interview participants is shown in Table 2.

Local drinking customs and norms

Types of alcohol consumed

It was consistently reported that sachets, also called *buveeras* or *tot packs*, were the most commonly consumed type of alcohol in Rakai's fishing communities. Found predominantly in sub-Saharan Africa, sachets are typically 100 ml plastic bags filled with hard liquor that are manufactured and produced by large-scale distilleries. Sachets have high alcohol content (~40%), and one sachet contains the equivalent of approximately 2.5 drinks by US standards. They are the most inexpensive type of alcohol in the area (costing around 500 shillings or US$0.13), particularly in relation to their high alcohol content. They are also portable and are often consumed while walking, working or fishing. Both male and female participants across focus groups and interviews felt the availability of sachets in their communities contributed most to patterns of hazardous alcohol use, including use of violence and sexual risk-taking, compared to all other forms of alcohol (e.g. beer, home-brewed alcohol or wine).

According to all participants, commercially manufactured beer is more expensive than sachets (2,000 shillings or US$0.56). Yet, bottled beer plays a significant role in fishing communities, among those who can afford it. Both focus group and interview participants agreed it is common for male friends to meet and drink bottled beer, often buying rounds for each other. Unlike sachets, which are easily carried around from place to place, bottled beer requires purchase from and return of the bottle to the same establishment. Thus, beer commonly serves as a central feature of men physically coming together, at a bar or local shop, to drink and talk with friends. In this capacity, beer facilitates the building of male social bonds. Similarly, participants noted that buying and drinking beer served as a frequent backdrop for men meeting and developing connections with potential female intimate/sex partners. In contrast, women gathering with girlfriends to drink beers together in a bar was essentially unheard of. Although women are often in bars, most typically as barmaids selling drinks and serving customers, all participants, both men and women, felt that the idea of women purposively going to a public establishment to buy and consume drinks was culturally inappropriate.

People who want to consume alcohol outside of an establishment prefer the small and portable sachets. This was noted to be particularly true for those engaged in fishing, as participants explained that fishermen often consume alcohol while working, and sachets are easier to carry onto and store on their boats. Another preferred aspect of sachets was their cost-effectiveness when it came to becoming intoxicated. Participants in both focus groups and interviews agreed it was easier to become intoxicated from drinking sachets, overall and for less money than from drinking beer. Additionally, one female focus group participant claimed that some individuals prefer to start drinking beer and switch to sachets once they start to become drunk. Two adult participants, a male and female, also stated that some individuals mix beer with sachets to produce a more potent drink.

Another alcoholic beverage frequently consumed in this setting is home-brew. Although there are many variations, participants explained that home-brewed alcohol can be made by boiling water, spices, tea leaves or bananas and sugar. Participants also commonly described the composition and consumption of DCL, an inexpensive drink consisting of dried yeast and banana juice. In fishing villages, home-brewed alcohol is generally reserved for religious functions or family gatherings. Participants explained that, currently, home-brewed alcohol can be expensive and difficult to find, due to a scarcity of bananas and tea leaves in the fishing areas, resulting from crop pests and weather changes. Both men and women also expressed fears related to the sanitation and safety of drinking home-brew, as it is typically brewed informally in homes that may not contain adequate sanitation standards.

Only five focus group and interview participants mentioned drinking wine, and it appears reserved principally for religious ceremonies. Several focus group participants mentioned consuming different types of liqueurs or mixed drinks (e.g. Amarula, Smirnoff Ice) from time to time but not on a regular basis, given their comparatively high cost.

Legal drinking age

While the legal drinking age in Uganda is 18 years old, both focus group and interview participants felt that laws regarding drinking were generally disregarded by law enforcement, bars and club owners and stores that sell alcohol. One adult female focus group participant recalled that, 'you find children comfortably seated in the bar drinking alcohol'. Underage minors most commonly obtain their alcohol at bars or in stores. One focus group participant blamed bar/store owners' willingness to sell alcohol to underage buyers on the high levels of poverty in the fishing villages. When asked at what age people start drinking alcohol in Rakai, most focus group and interview participants either said that 'everyone drinks', or that most people (particularly males) start drinking before 15 years old.

Cultural norms: men and boys

Participants from both focus groups and interviews reported that fishing areas were characterised by a pervasive culture of alcohol consumption. During interviews, many men narrated how common it was for both adult and younger men to move to one of the fishing areas on Lake Victoria (from other areas in Uganda) to secure work as a fisherman or fisherman's assistant to ensure financial stability. Men interviewed reported that, as fishermen, they often send money home to their families who live in other areas of Uganda. There was a common perception among all participants that the lake provides an endless supply of fish, and therefore an endless supply of money to those in the fishing industry. Both focus group and interview participants agreed that fishermen and local youth are the groups of people who drink the most alcohol in the fishing areas. Alcohol is often consumed while fishing, a trend that was attributed to the cold, difficult conditions on the lake and the fact that fishermen cannot easily sleep on their boats despite the fact that they often spend days fishing. Participants felt that age was a less of a determinant of alcohol consumption than gender. It was reported to be far more culturally acceptable for men and boys of any age to drink alcohol than for women and girls.

Cultural norms: women and girls

With regard to women's use of alcohol, focus group participants suggested that drinking alcohol contradicted widespread normative ideals of what it meant to be feminine in this patriarchal Ugandan setting. Male and female participants across two adult focus groups felt that rather than drinking alcohol at a bar, women should be at home preparing food or tending to children. One young adult male focus group participant believed that women have 'fragile minds' that 'cannot accommodate alcohol' without leading them to make poor decisions (such as wearing 'indecent' clothing) or becoming the victim of violence. Both men and women across focus groups felt that women who drink alcohol – whether in moderation or at hazardous levels – were likely to develop bad reputations and others in the community would look down on their behaviour. Another idea shared by both men and women in focus groups was that sex workers lure customers by compelling men to buy them alcohol.

Facilitators to participation in an HIV services-based Alcohol + IPV intervention

Awareness of links between alcohol consumption and IPV

When asked to name the biggest consequence of alcohol use, men across both focus groups and interviews most often cited (unprompted) violence or fighting (particularly between spouses), followed by marriage/family problems and sexual violence or promiscuity on the part of both men and women. They expressed an awareness of the links between partner violence and alcohol use. In addition, four of the male interview participants admitted to perpetrating violence or fighting with his spouse while under the influence of alcohol. However, in these situations men often perceived their spouse as the instigator of the violence or blamed their own violent behaviour on alcohol.

Support for the idea of an integrated HIV services-based Alcohol + IPV reduction intervention

Study participants were asked to provide their opinions about the idea of a hypothetical Alcohol + IPV reduction intervention offered as part of HIV post-test counselling in their community. Most recognised the potential financial benefits of participation, with one female young adult focus group participant citing that she has an acquaintance who 'doesn't buy clothes or have a family, he drinks all his money'.

Most male focus group and interview participants supported the idea, positing how it could foster improved health and self-respect for the individual, and strengthen marriages. Men who participated in one focus group shared how they would like help improving their relationships with their wives. Most believed that an approach such as an integrated Alcohol + IPV reduction intervention would provide an opportune modality for addressing some of the most pertinent relationship/marriage issues of concern to them. One member of the RHSP CAB described how men often turned to him for help in their relationships because they preferred getting assistance through confidential but familiar sources. He further explained that men were reluctant to seek relationship help in what they consider more public/less familiar spaces, such as the offices of the Community Development Officers (local government officers who liaise between residents and community services).

Most focus group and interview participants said they thought people in their community would benefit from the provision of an Alcohol + IPV programme in their region, particularly if offered by a trusted organisation.

HIV diagnosis as a prompt for behaviour change

Interview participants who were living with HIV talked about how learning of their HIV-positive serostatus was a main driver of their reduced alcohol consumption and risky sex. When narrating details about their behaviour change, post-HIV diagnosis, most HIV-positive men referred specifically to reducing the number of their sexual partners, consistently wearing condoms when having sex and either reducing or stopping alcohol consumption entirely.

Barriers to participation in an HIV services-based Alcohol + IPV intervention

The main concern about whether people, particularly men, would participate in this intervention pertained to the idea that consuming alcohol was a deep-rooted practice in the fishing communities. This concern manifested itself in two potential obstacles. First, many participants felt that a larger number of residents were in need of alcohol risk reduction services than could be accommodated in one programme. Thus, there was concern that even if an integrated Alcohol + IPV programme was available it might not be able to reach everyone in need in the fishing communities.

Second, men from both interviews and focus groups expressed uncertainty about what it meant to consume an unacceptable (or hazardous) level of alcohol. For the most part, the idea of having a drinking problem was binary – a person either had no alcohol problem or was an alcoholic. Because of this, many men interviewed could only initially conceive of a useful alcohol intervention as one designed for alcoholics. At the same time, however, despite the fact that alcoholics were perceived to be most in need of an intervention in this community, participants felt they would be the hardest group to effectively reach and engage, given their dependence on alcohol.

When it was explained how a hypothetical alcohol intervention would not necessarily target alcoholics, but could help hazardous drinkers who may or may not develop alcohol dependence, participants revealed uncertainty about what amounts and patterns of alcohol use are problematic. It was felt that definitions of hazardous alcohol consumption varied widely from person to person. Negative implications surrounding drinking were commonly linked to adverse actions taken by an individual while intoxicated, as opposed to the amount of alcohol the individual had consumed. One male focus group participant explained how some people could consume a few sachets before becoming intoxicated, while others could consume 20 sachets before being impacted. This further complicated understandings about the idea of having a drinking problem, and what types of drinkers would benefit from involvement in an alcohol reduction intervention. Men from both interviews and focus groups suggested that a successful intervention in this setting would need to educate people about the signs and symptoms of hazardous drinking, including the fact that some indicators are more difficult to identify than others. Participants also narrated how it was not common knowledge in the community that symptoms of hazardous drinking could co-occur. Thus, mild alcohol problems were likely overlooked, despite the fact that they could become harmful over time.

To ensure that people with early warning signs of problem drinking are not passed over, participants suggested that an alcohol reduction intervention account for a range of drinking habits and levels of alcohol tolerance in order to be effective.

Adherence to traditional gender roles

Traditional gender roles that highlight men's power over women were prominent among the barriers to participation in an Alcohol + IPV intervention. One male focus group participant felt that IPV reduction programmes would be imposed on them from 'developed countries' and that this would only negatively impact men. Two other adult male focus group participants felt that an IPV reduction programme should counsel women to follow their husband's orders, or to respect their husbands more. A

CAB member also cautioned that involving men in an IPV reduction programme would be perceived by men as interference in the family, and that some men would feel angry. This point was also highlighted by some men in focus groups who felt that women might be blamed for bringing their husbands to the programme, and may experience more violence as a result.

Ideas for tailoring a combined Alcohol + IPV intervention

Health education and tips to drink responsibly

Although men in both focus groups and interviews were aware of the financial and marriage consequences of alcohol, they were less aware of the general health consequences of alcohol consumption. As part of the interview guide, moderators showed participants an image of a human body taken from the World Health Organization's Brief Intervention for Hazardous and Harmful Drinking (World Health Organization 2001). When presented with the image, men generally reacted positively and several participants recommended using that image in an Alcohol + IPV intervention. When asked to cite the facts that they already knew, most interview participants knew about memory loss, and tingling of nerves or trembling. When asked to cite the facts they had not known, most men stated being unaware of the risks of low sexual performance and cancer.

Focus on partner violence in a non-threatening way

Most interview participants recommended that a spouse be present during an Alcohol + IPV intervention, with only three men preferring to take part in the intervention by themselves. One female focus group participant emphasised not placing blame on either the husband or wife for actions, particularly when talking about IPV against a spouse, with the spouse present. CAB members and HCT counsellors also recommended bringing the spouse as a way of building rapport between counsellors and the participant, as well as reducing the risk of conflict after the session.

Involve authority figures and both male and female counsellors

Participants from both focus groups and interviews shared how they would prefer to talk about their personal experiences with alcohol or IPV with someone they perceive to have authority and expertise in their community. In particular, participants mentioned involving health workers or HCT counsellors. One male focus group participant and one CAB member felt that men generally avoid talking with their friends or family about IPV or alcohol use, as they want to avoid becoming the subject of gossip in the community. Only one interview participant felt comfortable talking with friends about any of these issues. One female focus group participant also supported the idea of having both male and female counsellors available in order for women to feel more comfortable talking about their experiences of IPV and for men to be provided a space where they are more willing to admit to perpetration. Most men in interviews also supported the idea of involving a spouse in an Alcohol + IPV intervention, although participants felt that the decision should be left to the discretion of the

couple, particularly given the previous comments that it could be seen as a wife interfering and could result in further violence.

Collaborate with trusted organisations

Female participants in one focus group and CAB members highlighted that collaboration with trusted organisations would increase the legitimacy of the intervention, particularly given that it refers to sensitive topics. Collaboration with a well-established organisation would also potentially reduce concern that the programme is being imposed on them by an outside 'developed country' or organisation, as mentioned by one man as a barrier to participation. In this particular instance, two adult women recommended partnering specifically with the Rakai Health Sciences Program. A member of the CAB suggested partnering with other organisations in the area to adapt the programme and create a strong network where services are more broadly available to people in multiple communities.

Discussion

This qualitative study revealed that alcohol use is pervasive in Rakai's fishing communities. Sachets are currently the most popular type of alcohol in these areas, in large part because of their inexpensive cost, portability and strong alcohol content. Ugandan policy makers recently recognised that sachets have contributed to excessive alcohol consumption; however, despite passing a bill outlawing the sale of sachets in 2017 (Ssali 2016), it remains unknown if the policy will be enforced, particularly given the fact that participants consistently cited lax enforcement of regulations related to drinking alcohol.

While participants acknowledged that both men and women in fishing communities drink, deeply gendered notions of alcohol exist, primarily in terms of the way drinking relates to masculinity and femininity. In contrast to the gendered expectations of women's non-use of alcohol, cultural norms in Rakai's fishing villages openly encourage and condone drinking among both men and boys. This widespread acceptance of alcohol use by men not only normalises drinking in fishing communities, it amplifies and facilitates other behaviours condoned in male-dominated cultures, such as sexual risk-taking and perpetration of violence. Both men and women are more likely to accept and rationalise violence against women when it is embedded in societal norms (Koenig et al. 2003; Tumwesigye and Kasirye 2006; Wagman et al. 2009). This reality presents both opportunities and challenges when thinking about how to intervene on men's use of alcohol as a public health problem.

Men and women in these fishing communities were comfortable talking about alcohol use and the wide range of drinking patterns demonstrated by residents. While being an 'alcoholic' was perceived negatively (as was being a woman who drinks), there was no shared understanding of hazardous drinking by men, absolving most male alcohol users from thinking their consumption was in any way problematic. This creates a propitious environment for introducing prevention education and harm-reduction programming, since multiple forms of men's drinking seem less stigmatised

(as behavioural or moral problems) than they are in other settings (e.g. in Europe or the USA).

Clinic-based and health-focused alcohol interventions have been among the most successful and cost-effective approaches for reducing problematic alcohol use in high-income areas, and alcohol treatment has also shown promise for reducing IPV in these settings (O'Donnell et al. 2013; Solberg, Maciosek and Edwards 2008; O'Farrell et al. 2003). Several community-based programmes have been designed and found to effectively reduce hazardous alcohol use by changing the environment in which people drink, targeting everyone from the individual drinker, healthcare providers, local policy makers and law enforcement agencies (Kelly-Weeder, Phillips and Rounseville 2011).

Fortunately, a growing number of interventions focused on alcohol reduction are being designed for low-income settings. Some target alcohol harm reduction alone, while others address intersections between alcohol and other issues, including HIV risk and infection, IPV and other forms of gender-based violence. Economic interventions, for instance, are implemented across the globe with increasing success (Angelucci 2008). There is also a growing body of research on this type of intervention in sub-Saharan Africa. The World Health Organization's brief alcohol intervention was designed to provide a comprehensive approach to alcohol screening and brief intervention in primary health care/clinic settings and has been successfully implemented and found to reduce alcohol use in both Kenya and South Africa (Butler et al. 2013; Angus et al. 2014). In particular, research from South Africa has found that clinic patients exposed to a behavioural intervention addressing alcohol and HIV demonstrated reduced sexual risk behaviours and increased healthy attitudes about drinking (Kalichman et al. 2007). Findings from the current study would be instrumental for adapting this alcohol intervention for use in an HCT (vs. primary care) setting, such as that offered by RHSP. This approach would enable provision of services to both alcohol-using men and their female partners, either individually or as a couple, during HIV post-test counselling and/or treatment for those living with HIV.

The HIV-positive men we interviewed all narrated how receiving their HIV diagnosis was a catalyst for positive behaviour change. This included reducing alcohol consumption, engaging in fewer risky sexual practices and pursuing a more positive relationship with spouses. Other studies have shown similar results, with HIV-positive individuals demonstrating significant positive behaviour changes after diagnosis (Khanna et al. 2013; Pettifor et al. 2010; Steward et al. 2009). This suggests that an Alcohol + IPV intervention could be effective if integrated into the work of HIV service provider organisations. Post-diagnosis interventions have also shown promise for reducing risky sexual behaviours (Corneli et al. 2014; Pettifor et al. 2010; Sikkema et al. 2014).

Lastly, we found in our study what researchers have previously observed in other parts of sub-Saharan Africa. When working with alcohol-consuming men in relationships, it is critical to directly address the man's drinking as opposed to targeting his female partner since cultural norms surrounding gender give women little control (or influence) over their partner's behaviour (Wechsberg et al. 2016). Extremely promising for pilot testing in Uganda's fishing villages are interventions designed for couples

and men that have been adapted and tested in South Africa (Wechsberg et al. 2015). Many male participants in the current study indicated they would prefer having their female partner involved, should they enrol in an alcohol harm-reduction programme. Thus, a couples-based intervention that addresses the synergistic relationship between alcohol use, IPV and sexual risks might be both feasible and effective in Rakai's fishing communities.

Limitations

This study had limitations. Participants were recruited by staff from RHSP's Social and Behavioral Sciences Department. While this department is separate from RHSP's HIV service provision department, it is possible that participants felt compelled to provide positive feedback regarding RHSP. We addressed this limitation by avoiding referencing RHSP in the qualitative guide questions. Furthermore, participants could have answered according to a social desirability bias. We attempted to mitigate this bias by developing questions that focus on community (vs. individual) perspectives without placing blame on individuals for their views. Additionally, one-on-one interviews were conducted with men only, in order to maximise the amount of information collected regarding their perspectives. Interviews with women would have provided an individual perspective that is lacking in this study. This remains an important area for future exploration. Finally, all participants agreed to be audio recorded and the use of audio recording may have inhibited some participants from talking in depth about sensitive topics.

Conclusion

This study highlighted the potential to integrate an alcohol and IPV reduction programme into the work of an existing, trusted HIV service provider organisation. It revealed key barriers and facilitators to success that should be addressed when designing a programme for this population. Further research should be undertaken to determine the feasibility and effectiveness of such a programme.

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The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this paper.

References

Angelucci, M. 2008. "Love on the Rocks: Domestic Violence and Alcohol Abuse in Rural Mexico." *Journal of Economic Analysis & Policy* 8 (1): 1935–1682.

Angus, C., N. Latimer, L. Preston, J. Li, and, R. Purshouse. 2014. "What Are the Implications for Policy Makers? A Systematic Review of the Cost-Effectiveness of Screening and Brief Interventions for Alcohol Misuse in Primary Care." *Frontiers in Psychiatry* 5: 114.

Beck, A., and, A. Heinz. 2013. "Alcohol-Related Aggression-Social and Neurobiological Factors." *Deutsches Aerzteblatt* 110: 711–715.

Butler, C. C., S. A. Simpson, K. Hood, D. Cohen, T. Pickles, C. Spanou, J. Mccambridge., et al. 2013. "Training Practitioners to Deliver Opportunistic Multiple Behaviour Change Counselling in Primary Care: A Cluster Randomised Trial." *BMJ* 346: f1191.

Chang, L. W., M. K. Grabowski, R. Ssekubugu, F. Nalugoda, G. Kigozi, B. Nantume, J. Lessler., et al. 2016. "Heterogeneity of the HIV Epidemic in Agrarian, Trading, and Fishing Communities in Rakai, Uganda: An Observational Epidemiological Study." *The Lancet HIV* 3 (8): e388–e396.

Corneli, A., A. Pettifor, G. Kamanga, C. Golin, K. Mckenna, S.-S. Ou, G. Hamela., et al. 2014. "HPTN 062: A Feasibility and Acceptability Pilot Intervention to Reduce HIV Transmission Risk Behaviors among Individuals with Acute and Early HIV Infection in Lilongwe, Malawi." *AIDS & Behavior* 18 (9): 1785–1800.

Crabtree, B. F., and W. L. Miller. 2000. *Doing Qualitative Research*. Thousand Oaks, CA: SAGE.

Devries, K. M., J. C. Child, L. J. Bacchus, J. Mak, G. Falder, K. Graham, C. Watts, and L. Heise. 2014. "Intimate Partner Violence Victimization and Alcohol Consumption in Women: A Systematic Review and Meta-Analysis." *Addiction* 109 (3): 379–391.

Giancola, P. R., C. A. Levinson, M. D. Corman, A. J. Godlaski, D. H. Morris, J. P. Phillips, and J. C. D. Holt. 2009. "Men and Women, Alcohol and Aggression." *Experimental and Clinical Psychopharmacology* 17 (3): 154–164.

Kalichman, S. C., L. C. Simbayi, R. Vermaak, D. Cain, S. Jooste, and K. Peltzer. 2007. "HIV/AIDS Risk Reduction Counseling for Alcohol Using Sexually Transmitted Infections Clinic Patients in Cape Town, South Africa." *Journal of the Acquired Immune Deficiency Syndromes* 44 (5): 594–600.

Kelly-Weeder, S., K. Phillips, and S. Rounseville. 2011. "Effectiveness of Public Health Programs for Decreasing Alcohol Consumption." *Patient Intelligence* 2011 (3): 29.

Khanna, A. S., S. M. Goodreau, P. M. Gorbach, E. Daar, and S. J. Little. 2013. "Modeling the Impact of Post-Diagnosis Behavior Change on HIV Prevalence in Southern California Men Who Have Sex with Men (MSM)." *AIDS & Behavior* 18 (8): 1523–1531.

Koenig, M. A., T. Lutalo, F. Zhao, F. Nalugoda, F. Wabwire-Mangen, N. Kiwanuka, J. Wagman., et al. 2003. "Domestic Violence in Rural Uganda: Evidence from a Community-based Study." *Bulletin of the World Health Organization* 81 (1): 53–60.

Kouyoumdjian, F. G., N. Findlay, M. Schwandt, and L. M. Calzavara. 2013. "A Systematic Review of the Relationships Between Intimate Partner Violence and HIV/AIDS." *PLoS ONE* 8 (11): E81044.

Leadley, K., C. L. Clark, and R. Caetano. 2000. "Couples Drinking Patterns, Intimate Partner Violence, and Alcohol-Related Partnership Problems." *Journal of Substance Abuse* 11 (3): 253–263.

Leonard, K. E., and B. M. Quigley. 1999. "Drinking and Marital Aggression in Newlyweds: An Event-Based Analysis of Drinking and the Occurrence of Husband Marital Aggression." *Journal of Studies on Alcohol* 60 (4): 537–545.

National Council on Alcoholism and Drug Dependence. 2015. "Facts about Alcohol." National Council on Alcoholism and Drug Dependence. Accessed December 31, 2018. https://www.ncadd.org/about-addiction/alcohol/facts-about-alcohol

O'Donnell, A., P. Anderson, D. Newbury-Birch, B. Schulte, C. Schmidt, J. Reimer, and E. Kaner. 2013. "The Impact of Brief Alcohol Interventions in Primary Healthcare: A Systematic Review of Reviews." *Alcohol and Alcoholism* 49 (1): 66–78.

O'Farrell, T. J., W. Fals-Stewart, M. Murphy, and C. M. Murphy. 2003. "Partner Violence Before and After Individually Based Alcoholism Treatment for Male Alcoholic Patients." *Journal of Consulting and Clinical Psychology* 71 (1): 92–102.

Pettifor, A., C. Macphail, A. Corneli, J. Sibeko, G. Kamanga, N. Rosenberg, W. C. Miller., et al. 2010. "Continued High Risk Sexual Behavior following Diagnosis with Acute HIV Infection in South Africa and Malawi: Implications for Prevention." *AIDS & Behavior* 15 (6): 1243–1250.

QSR International Pty Ltd. 2012. NVivo qualitative data analysis software. Version 10.

Rehm, J., C. Mathers, S. Popova, M. Thavorncharoensap, Y. Teerawattananon, and J. Patra. 2009. "Global Burden of Disease and Injury and Economic Cost Attributable to Alcohol Use and Alcohol-Use Disorders." *The Lancet* 373 (9682): 2223–2233.

Sikkema, K. J., L. Abler, N. B. Hansen, P. A. Wilson, A. S. Drabkin, A. Kochman, J. C. Macfarlane., et al. 2014. "Positive Choices: Outcomes of a Brief Risk Reduction Intervention for Newly HIV-Diagnosed Men Who Have Sex with Men." *AIDS & Behavior* 18 (9): 1808–1819.

Solberg, L. I., M. V. Maciosek, and N. M. Edwards. 2008. "Primary Care Intervention to Reduce Alcohol Misuse." *American Journal of Preventive Medicine* 34 (2): 143–152.

Ssali, G. 2016. "Uganda to ban sale of alcohol in sachets in September 2017." Accessed December 30, 2018. https://www.independent.co.ug/uganda-ban-sale-alcohol-sachets-september-2017a

Steward, W. T., R. H. Remien, J. A. Higgins, R. Dubrow, S. D. Pinkerton, K. J. Sikkema, H.-H. M. Truong., et al. 2009. "Behavior Change following Diagnosis with Acute/Early HIV infection-a move to serosorting with other HIV-infected individuals. The NIMH Multisite Acute HIV Infection Study: III." *AIDS & Behavior* 13 (6): 1054–1060.

Tumwesigye, N. M., and R. Kasirye. 2006. "Gender and the Major Consequences of Alcohol Consumption in Uganda, in Alcohol, Gender and Drinking Problems." In *Alcohol, Gender, and Drinking Problems: Perspectives from Low and Middle Income Countries*, edited by Isidore Silas Obot and Robin Room, 189–208. Geneva: World Health Organization, Department of Mental Health and Substance Abuse.

Tumwesigye, N. M., L. Atuyambe, R. K. Wanyenze, S. P. Kibira, Q. Li, F. Wabwire-Mangen, and G. Wagner. 2012. "Alcohol Consumption and Risky Sexual Behaviour in the Fishing Communities: Evidence from Two Fish Landing Sites on Lake Victoria in Uganda." *BMC Public Health* 12 (1): 1069. doi: 10.1186/1471-2458-12-1069

Uganda National Council for Science and Technology (UNCST). 2014. *"National Guidelines for Research Involving Humans as Research Participants."* Kampala: UNCST.

Wagman, J., J. N. Baumgartner, C. W. Geary, N. Nakyanjo, W. G. Ddaaki, D. Serwadda, R. Gray., et al. 2009. "Experiences of Sexual Coercion among Adolescent Women: Qualitative Findings from Rakai District, Uganda." *Journal of Interpersonal Violence* 24 (12): 2073–2095.

Wawer, M. J., R. H. Gray, N. K. Sewankambo, D. Serwadda, L. Paxton, S. Berkley, D. Mcnairn., et al. 1998. "A Randomized, Community Trial of Intensive Sexually Transmitted Disease Control for AIDS Prevention, Rakai, Uganda." *AIDS* 12 (10): 1211–1225.

Wawer, M. J., N. K. Sewankambo, D. Serwadda, T. C. Quinn, N. Kiwanuka, C. Li, T. Lutalo., et al. 1999. "Control of Sexually Transmitted Diseases for AIDS Prevention in Uganda: A Randomised Community Trial." *The Lancet* 353 (9152): 525–535.

Wechsberg, W. M., N. El-Bassel, T. Carney, F. A. Browne, B. Myers, and W. A. Zule. 2015. "Adapting an Evidence-Based HIV Behavioral Intervention for South African Couples." *Substance Abuse Treatment, Prevention, and Policy* 10 (1): 6 doi: 10.1186/s13011-015-0005-6

Wechsberg, W. M., W. A. Zule, N. El-Bassel, I. A. Doherty, A. M. Minnis, S. D. Novak, B. Myers., et al. 2016. "The Male Factor: Outcomes from a Cluster Randomized Field Experiment with a Couples-Based HIV Prevention Intervention in a South African Township." *Drug and Alcohol Dependence* 161: 307–315.

White, H. R., and P.-H. Chen. 2002. "Problem Drinking and Intimate Partner Violence." *Journal of Studies on Alcohol* 63 (2): 205–214.

World Health Organization. 2001. "Brief Intervention for Hazardous and Harmful Drinking." Accessed December 30, 2018. http://apps.who.int/iris/bitstream/10665/67210/1/WHO_MSD_MSB_01.6b.pdf

World Health Organization. 2006. "Intimate Partner Violence and Alcohol." Accessed December 30, 2018. http://www.who.int/violence_injury_prevention/violence/world_report/factsheets/fs_intimate.pdf

World Health Organization. 2009. "Global Health Risks: Mortality and Burden of Disease Attributable to Selected Major Risks." Accessed December 30, 2018. http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf

World Health Organization. 2014. "Global Status Report on Alcohol and Health 2014." Accessed December 30, 2018. http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

World Health Organization. 2015. "Alcohol Fact Sheet." Accessed December 30, 2018. http://www.who.int/mediacentre/factsheets/fs349/en/

Zablotska, I. B., R. H. Gray, D. Serwadda, F. Nalugoda, G. Kigozi, N. Sewankambo, T. Lutalo, F. W. Mangen, and M. Wawer. 2006. "Alcohol Use Before Sex and HIV Acquisition: A Longitudinal Study in Rakai, Uganda." *AIDS* 20 (8): 1191–1196.

Zablotska, I. B., R. H. Gray, M. A. Koenig, D. Serwadda, F. Nalugoda, G. Kigozi, N. Sewankambo, T. Lutalo, F. W. Mangen, and M. Wawer. 2009. "Alcohol Use, Intimate Partner Violence, Sexual Coercion and HIV among Women Aged 15–24 in Rakai, Uganda." *AIDS & Behavior* 13 (2): 225–233.